

**HIGH SENSITIVITY CROSSLINKABLE PHOTORESIST COMPOSITION, BASED ON
SOLUBLE, FILM FORMING DENDRIMERIC CALIX[4]ARENE COMPOSITIONS
METHOD AND FOR USE THEREOF**

ABSTRACT OF THE DISCLOSURE

A high sensitivity, organic solvent developable, high resolution photoresist composition for use in E-beam lithography is disclosed. The composition of the present invention comprises a high sensitivity, soluble, film forming photoresist composition of dendrimeric calix[4]arene derivatives and processes for forming lithographic patterns with a crosslinker selected from glycoluril derivatives capable of reacting with these dendrimer under acid catalysis, a photoacid generator and an organic solvent. The composition of the present invention is particularly useful for production of negative tone images of high resolution (less than 100nanometers).